

SAXE-ONE

Soy-Based Fatty Acid Ester

Airable Research Lab has developed a multifunctional soy-based fatty acid ester that can substitute for petroleum-based chemicals, enabling a variety of low-cost and low-toxicity products.

APPLICATIONS

SAXE-ONE has potential applications as a paint stripper and lubricant, as well as other industrial applications that entail extreme exposure conditions (temperature, pH, microbes, or corrosive environments). The product can also be used as a starting material for making acrylate monomers, friction reducers, and plasticizers.

TECHNOLOGY DATA

Property	Value
Active	100%
Physical form at 20°C	Liquid
Density	0.99 g/mL
Boiling point (ASTM D 1120)	293°C
Freezing point (EP 10)	-49°C
Viscosity at 20°C	52 cps
Refractive index at 20°C	1.475
Flash point (ASTM D93)	72
Hydroxyl value (ASTM D4274)	137 mg KOH/g
Acid value	<1.0 mg of KOH/g
Iodine value/number (USP 42/NF 37 Supplement 2)	40 g/100 g
Solubility (20 wt% at 20°C):	
Acetone	Soluble
2-butoxy ethyl acetate	Soluble
Heptane	Soluble
Methyl ethyl ketone	Soluble
Soymethyl ester/ethyl lactate blend	Soluble
Soymethyl ester	Soluble
Toluene	Soluble
Water	Not soluble